

## © EPODOC / EPO

PN - JP63061097 A 19880317  
PD - 1988-03-17  
PR - JP19860206623 19860901  
OPD - 1986-09-01  
TI - EXOTHERMIC DETERGENT  
IN - INQUE ETSUO  
PA - INQUE ETSUO  
IC - C11D17/00

## © WPI / DERWENT

TI - Exothermic detergent which raises temp. of cleaning water - comprises mixt. of detergent, exothermic material and opt. bleaching agent

PR - JP19860206623 19860901

PN - JP63061097 A 19880317 DW198817 003pp

PA - (INOU-I) INQUE E

IC - C11D17/00

AB - J63061097 A new detergent id designed to raise the temp. of the water when cleaning. Pref., an exothermic body generates heat when mixed with water. The detergent is a mixt. of an exothermic body, detergent and, opt., a bleaching agent.

- Available exothermic materials include all types of chemicals, such as oxidants, hydroxides, acid cpds. and sulphuric cpds.. They generate heat by various types of reactions when dissolved in water. Other detergent components such as surfactants, fluorescent agents enzymes, softening agents and neutralising agents may optionally be used.

- USE/ADVANTAGE - The water temp. is raised significantly to facilitate cleaning of washing. The detergent is also suitable for cleaning water pipes, bath rooms, toilets and kitchens and for washing cars, bicycles, etc. It makes cleaning in winter much easier.( 0/1)

OPD - 1986-09-01

AN - 1988-115503 [17]



Application No: GB 0224564.5  
Claims searched: 1-65

Examiner: Rhodri Evans  
Date of search: 17 January 2003

## Patents Act 1977 : Search Report under Section 17

### Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X,Y	At least X:1, Y:30	WPI abstract accession number 1988-115503 [17] & JP 63061097 A (Inoue) 17.03.88 (see abstract)
Y	At least 30	WPI abstract accession number 1987-157456 [23] & AU 6362586 A (Thomson) 30.04.87 (see abstract)
Y	At least 30	US 6131237 (Kasper) all figures and line 45 column 2 to line 7 column 3.

### Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

### Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC<sup>v</sup>:

A4F; F4X

Worldwide search of patent documents classified in the following areas of the IPC<sup>7</sup>:

A47L; F24J

The following online and other databases have been used in the preparation of this search report:

WPI, EPODOC, PAJ